SECTION C

C-1 NSN/ITEM DESCRIPTION

PCR-C-022, CHICKEN BREAST FILLET WITH RIB MEAT, SEASONED, CHUNKED AND FORMED, GRILLED, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE

Each component is consumed by combat personnel under worldwide environmental extremes as part of an operational ration, and is a source of nutritional intake. It is essential that this item be produced in accordance with good commercial practice to attain high standards of appearance, odor, flavor, and texture so that high levels of troop acceptance are achieved.

C-2 PERFORMANCE REQUIREMENTS

- A. <u>Production standard</u>. A sample shall be subjected to first article or product demonstration model inspection as applicable, in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements document.
- B. <u>Commercial sterility</u>. The packaged food shall be processed until commercially sterile.
- C. Shelf life. The packaged food shall meet the minimum shelf life requirement of 36 months at $80^{\circ}F$.

D. Appearance.

- (1) <u>Chicken</u>. The chicken breast fillet shall be chunked and formed seasoned chicken breast meat with rib meat. The chicken breast fillet shall be similar to a natural chicken breast shape and shall be intact. The chicken breast fillet shall be a golden brown color and shall have brown grill marks. The chicken breast fillet shall be free of bone or bone fragments, skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat.
- (2) <u>General</u>. The finished product shall be a grilled, chunked and formed, seasoned chicken breast fillet. The packaged food shall be free from foreign material such as, but not limited to dirt, insect parts, hair, wood, glass, or metal.

E. Odor and flavor.

- (1) <u>General</u>. The packaged chicken breast fillet shall have an odor and flavor characteristic of cooked, lightly seasoned, grilled chicken breast.
- (2) <u>Foreign</u>. The packaged food shall be free from foreign odors and flavors such as, but not limited to, burnt, scorched, rancid, sour, or stale.
- F. $\underline{\text{Texture.}}$ The chicken breast fillet shall simulate the hardness (initial bite) and chewing characteristics that are normally found in a tender, whole muscle chicken breast. The chicken fillet shall be moist.
- G. $\underline{\text{Drained weight}}$. The drained weight of the chicken breast fillet in an individual pouch shall be not less than 2.8 oz.
- H. <u>Palatability</u>. The finished product shall be equal to or better than the approved first article when applicable, or other approved model in palatability and overall appearance.

SECTION C CONTINUED

I. Nutrient content.

- (1) $\underline{\text{Protein content}}$. The protein content shall be not less than 16.0 percent.
- (2) $\underline{\text{Fat content}}$. The fat content shall be not greater than 6.0 percent.
- (3) Salt content. The salt content shall be not greater than 1.2 percent.

C-3 MISCELLANEOUS INFORMATION

THE FOLLOWING LIST OF INGREDIENTS IS PROVIDED FOR INFORMATION ONLY. THIS IS NOT A MANDATORY CONTRACT REQUIREMENT.

A. <u>Ingredients</u>. Boneless chicken breast with rib meat, seasoning [salt, maltodextrin, grill flavor (maltodextrin, flavor (from vegetable oil), modified food starch, corn syrup solids), mustard, hydrolyzed soy protein, onion powder, garlic powder, flavor (from vegetable oil), spices, natural smoke flavor, caramel color, polysorbate 80, spice extractives], water, modified food starch, sodium phosphate.

SECTION D

D-1 PACKAGING

Product shall be filled into pouches and each pouch shall be packed in a carton in accordance with MIL-PRF-44073, Packaging of Food in Flexible Pouches.

D-2 LABELING

Each pouch and each carton shall be labeled in accordance with the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073.

D-3 PACKING

Packing for shipment to ration assembler shall be in accordance with the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073.

D-4 MARKING

Marking of shipping containers shall be in accordance with the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073.

SECTION E INSPECTION AND ACCEPTANCE

Inspection for packaging, labeling and packing, and marking shall be in accordance with the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073.

E-6 QUALITY ASSURANCE PROVISIONS (PRODUCT)

Definitions.

- (1) <u>Critical defect</u>. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.
- (2) $\underline{\text{Major defect}}$. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.
- (3) <u>Minor defect</u>. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

Quality Assurance Provisions.

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required.

- A. <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
- (1) <u>Production standard inspection</u>. The first article or product demonstration model shall be inspected in accordance with the provisions of this Performance-based Contract Requirements document and evaluated for overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection.
- (2) Conformance inspection. Conformance inspection shall include the product examination and the methods of inspection cited in this section.
- * B. Product examination. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 1993. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in Table I. For drained weight inspection, a separate set of pouches shall be selected from the lot using the same sampling criteria as above. The pouches shall be immersed in 140°F to 190°F water for 10 minutes prior to the drained weight inspection.

SECTION E CONTINUED

TABLE I. Product defects $\frac{1}{2}$

Category		Defect
Major	Minor	<u>Appearance</u>
101		Bone or bone fragment measuring more than 0.30 inch in any dimension
102		Chunked and formed chicken breast fillet not seasoned chicken breast meat with rib meat
	201	Chicken breast fillet not a golden brown color or absence of brown grill marks
	202	Chicken breast fillet not similar to a natural chicken breast shape or not intact
	203	Total weight of skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat, more than 0.20 ounce
		Odor and flavor
	204	Odor or flavor not of a cooked, lightly seasoned, grilled chicken breast
		<u>Texture</u>
	205	Chicken breast fillet not similar to initial bite and chewing characteristics of a tender, whole muscle chicken breast
	206	Chicken breast fillet not moist
		Weight
	207	Drained weight of the chicken breast fillet in an individual pouch less than 2.8 ounces

^{1/} Presence of any foreign material such as, but not limited to dirt, insect parts, hair, wood, glass, or metal, or foreign odors and flavors such as, but not limited to burnt, scorched, moldy, rancid, sour, or stale shall be cause for rejection of the lot.

 $[\]underline{2}/$ Finished product not equal to or better than the approved first article, when applicable, or other approved model in palatability and overall appearance shall be cause for rejection of the lot.

SECTION E CONTINUED

C. Methods of inspection.

(1) Commercial sterility. Testing for commercial sterility shall be in accordance with MIL-PRF-44073.

- * (2) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year shelf life when stored at $80^{\circ}F$. Government verification may include storage for 6 months at $100^{\circ}F$ or 36 months at $80^{\circ}F$. Upon completion of either storage period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point hedonic scale to be considered acceptable.
- (3) <u>Drained weight</u>. The pouch contents shall be poured into a flatbottom container. A minimum of three times the pouch's volume of $180^{\circ}F$ to $190^{\circ}F$ water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat without breaking the chicken breast. The contents shall then be poured into a U.S. Standard 1/4 inch sieve in a manner that will distribute the product over the sieve without breaking the chicken breast. The sieve area shall be such that the distributed product does not completely cover all the openings of the sieve. The sieve shall be tilted at approximately a 45° angle and allowed to drain for 2 minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. The drained weight shall be reported to the nearest 0.1 ounce.
- (4) $\underline{\text{Nutrient content}}$. The sample to be analyzed shall be a composite of eight filled and sealed pouches, which have been selected at random from the lot. The composited sample shall be prepared (see Note) and analyzed for protein content, fat content, and salt content in accordance with the following methods of the Official Methods of Analysis of AOAC International:

Test	Method Number
Protein	988.05, 992.15
Fat	960.39, 985.15
Salt.	935.47

Test results shall be reported to the nearest 0.1 percent. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

NOTE: The USDA will use AOAC method 983.18 for preparation of the sample.

SECTION J REFERENCE DOCUMENTS

MILITARY SPECIFICATION

MIL-PRF-44073 - Packaging of Food in Flexible Pouches

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

ANSI/ASQCZ1.4-1993 - Sampling Procedures and Tables for Inspection by Attributes

AOAC INTERNATIONAL

Official Methods of Analysis of the AOAC International

TO: DSCP-HSL (Woloszyn/4435)

Subject: Document changes; PCR-C-022 Chicken Breast Fillet with Rib Meat, Seasoned, Chunked and Formed, Grilled, Packaged in a Flexible Pouch, Shelf Stable; Protein Requirement Deletion (DDC01-010)

- 1. Based on recent inquiries, the U.S. Army Soldier and Biological Chemical Command, Soldier Systems Center (SBCCOM) and COL Applewhite, Chief Dietician of the Army, have determined that, on a case-by-case basis, the protein requirement in some operational ration entrees could be eliminated. In these instances, reliance on drained weight and other nutritional/analytical requirements was acceptable.
- 2. SBCCOM requests that DSCP implement the following changes to the subject document for all MRE XXI and pending procurements until the document is formally amended or revised:

In section C-2, para I(Nutrient content): Delete "(1) protein content..." entirely.

In section E-6, para C (4) Nutrient content, lines 3 and 7: delete references to "protein content" and "protein 988.05, 992.15" accordingly.

DONALD A. HAMLIN
Team Leader
Food Engineering Services Team
Combat Feeding Program